[0027] It should be also understood that the terms "first," "second," "third," and so forth can be used herein to describe various elements. These terms are used to distinguish one element from another, but not to imply a required sequence of elements. For example, a first element can be termed a second element, and, similarly, a second element can be termed a first element, without departing from the scope of present teachings.

[0028] Moreover, it shall be understood that when an element is referred to as being "on" or "connected" or "coupled" to another element, it can be directly on or connected or coupled to the other element or intervening elements can be present. In contrast, when an element is referred to as being "directly on" or "directly connected" or "directly coupled" to another element, there are no intervening elements present. Other words used to describe the relationship between elements should be interpreted in a like fashion (e.g., "between" versus "directly between," "adjacent" versus "directly adjacent," and so forth). Spatially relative terms, such as "beneath," "below," "lower," "above," "upper" and the like may be used to describe an element or feature's relationship to another element(s) and/or feature(s) as, for example, illustrated in the drawings.

[0029] The term "consumer electronic (CE) device" shall be construed to mean any portable or non-portable electronic device having data processing capabilities, including a mobile device, cellular phone, mobile phone, smart phone, tablet computer, laptop computer, desktop computer, computer workstation, server, network device, network appliance, modem, router, personal digital assistant, music player, multimedia player, vehicle navigation system, television device, set-top-box, game controller, entertainment device, portable gaming device (e.g., a PlayStation Portable, etc.), car stereo, vehicle entertainment system (e.g., car, airplane, train, etc.), car charging device, battery pack, portable charger, power tool, quadcopter ("drone"), remotely controlled aircraft, device for virtual reality (VR) gaming, portable plug-in device (e.g., Universal Serial Bus (USB)-port portable device, High-Definition Multimedia Interface (HDMI)-port plug-in device), and the like.

[0030] According to various embodiments of this disclosure, it can be beneficial in many instances to allow consumer electronic devices to wirelessly transmit and/or share power between two or more consumer electronic devices. For example, some embodiments allow one cell phone to obtain power from and/or use battery power from another cell phone. It is a common situation where two people have smart phones with very different levels of battery charge remaining. For example, multiple portable devices (e.g., smart phones) are in a location with one or more of them having a significantly low battery charge where the person (s) with the low battery level would like to or needs to do things with their device. This may be due to the fact that they are the type of person that is always interfacing with their phone, or this may be due to the fact that there are a lot of remote people communicating with that person, possibly due to a big recent event where communication is important. Since these remote people communicating with the person with the smart phone with the low power already have the person's phone number in their contacts, it is often not convenient for that remote person to just use another person's phone that has more battery power. Similarly, a person's mobile device may be low on battery power because it has not been charged recently, while another person's device may have a nearly full battery because it has recently been charged.

[0031] The embodiments of this disclosure enable one to configure and implement wireless power transfer from one CE device to another CE device, or vice versa. In addition, the embodiments of this disclosure enable one to configure and implement wireless data transfer from one CE device to another CE device, or vice versa. The wireless power and data transfer can be provided simultaneously when required, but not necessarily. Moreover, the embodiments of this disclosure enable one to operatively connect more than two CE devices for wireless power and/or data transfer.

[0032] According to embodiments of this disclosure, a user can configure wireless power and data transfer between one or more pairs of CE devices. For example, when there are a plurality CE devices provided, the user can configure and authorize power transfer between at least some pairs of four CE devices, as well as configure and authorize data transfer between the same or different pairs of CE devices. Once the user configures wireless power and data transfer between certain CE devices, configuration information can be stored in a local or remote memory. Accordingly, when these CE devices are in predetermined proximity, they can automatically start wireless power and data transfer based on the configuration information. The configuration of wireless power and data transfer can be implemented using one of the CE devices or another user device, which can be designated as a group owner. Moreover, the process of configuring wireless power and data transfer between two or more CE devices can be implemented using at least one Graphical User Interface (GUI) available on one of the CE devices or another user device.

[0033] In certain embodiments, the process of configuring wireless power and data transfer between two or more CE devices starts with collecting, by a group owner device, coupling parameters from two or more CE devices. The group owner device further provides a GUI, which graphically illustrates the CE devices to the user. The user further can manipulate control elements of the GUI to establish, modify, or remove connections between two or more pairs of the CE devices to establish wireless power or data transfer between at least two of the CE devices. The user can control various parameters of wireless power and data transfer. For example, the user can select protocols to be used for data transfer, a time to initiate wireless power or data transfer, a time to discontinue or pause wireless power or data transfer, bandwidth parameters, battery charge levels, encryption protocols, and so forth.

[0034] It should be noted, however, that wireless power and data transfer does not necessarily replace cable connections. Thus, in certain embodiments, there can be provided both wired power/data transfer of a plurality of CE devices and wireless power/data transfer between two or more CE devices of the plurality of CE devices. For example, while a pair of CE devices can be wirelessly connected to transfer power, data exchange between these CE devices can be implemented via a cable. Similarly, the pair of CE devices can be wirelessly connected to transfer data, but power transfer between these CE devices can be implemented via a cable. In addition, one pair of CE devices can be wirelessly connected to transfer data between each other, but at least one of these CE devices can be also connected to another CE